STATE OF IDAHO Department of Fish and Game

Joseph C. Greenley, Director

Annual Project Closing Report MACKAY HATCHERY SPRING CHINOOK

Project No. 88E22030

Contract No. 03-7-208-35018

Period Covered: October 1, 1976 to September 30, 1977

Columbia River Fisheries Development Program

April, 1978

Mackay Hatchery Spring Chinook

Background

Salmon runs to Idaho have recently been at drastically low levels. The 1976 spring Chinook spawning run was the smallest of record. Therefore the Idaho Department of Fish and Game proposed a spring Chinook rearing program at the state-owned Mackay Hatchery and entered into a contract for this purpose with the National Marine Fisheries Service.

Fish produced are to be released in the Salmon River system to help maintain the Chinook run during its greatest crisis period. This project is the second largest Chinook rearing program in Idaho.

Incubation and Rearing

Mackay Hatchery received about 1,776,500 eyed eggs in early October from Rapid River and Mullan hatcheries. The eggs are all Rapid River stock. Incubation was done in up-welling boxes that were borrowed from Niagara Springs Hatchery. Some excessive loss of sac fry occurred for reasons not clearly apparent. Coagulated yolk and blue sac were present. We feel that it would be better to use Heath incubators with the next brood year.

We added 251,000 fish from Sandpoint Hatchery to the project in April, 1977.

Sunburn was a serious problem and induced mortality throughout the summer. Canvas covers were placed on all raceways and it was not until October that appearance of the fish noticeably improved.

Red throat and bacterial gill disease was contracted and treated with cutrine, Purina 4X, sulmet and terramycin.

At the end of the fiscal year there were 1,336,000 spring Chinook on hand, which averaged 24 per pound.

Submitted by:	Approved by: IDAHO DEPARTMENT OF FISH AND GAME
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